| | | | | | |
|---|---|---|---|---|---|
| | Area Weightage @ 8% | 27.68 | | | |
| | Total | 373.68 | | | |
| | 63mm dia Supply : | Mtrs. | 357 | **375.84** | **134174.88** |
| | Basic Rate: | 348.00 | | | |
| | Area Weightage @ 8% | 27.84 | | | |
| | Total | 375.84 | | | |
| | 75mm dia Supply : | Mtrs. | 450 | **433.08** | **194886.00** |
| | Basic Rate: | 401.00 | | | |
| | Area Weightage @ 8% | 32.08 | | | |
| | Total | 433.08 | | | |
| | 110mm dia Supply : | Mtrs. | 400 | **511.92** | **204768.00** |
| | Basic Rate: | 474.00 | | | |
| | Area Weightage @ 8% | 37.92 | | | |
| | Total | 511.92 | | | |
| | | | | | |
| 23 | Providng and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kg / sq.cm working pressure chemp plast / wavin or eqvivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of materials, labour charges, HOM of equipments and testing complete as per speicifications. | | | | |
| | S.R Page no 75 item no 11.56 | | | | |
| | with 90mm outer dia | m | 30 | **519.48** | **15584.40** |
| | Basic Rate: | 481.00 | | | |
| | Area Weightage @ 8% | 38.48 | | | |
| | Total | 519.48 | | | |
| | with 110mm outer dia | m | 65 | **743.04** | **48297.60** |
| | Basic Rate: | 688.00 | | | |
| | Area Weightage @ 8% | 55.04 | | | |
| | Total | 743.04 | | | |
| | with 140mm outer dia | m | 140 | **1231.20** | **172368.00** |
| | Basic Rate: | 1140.00 | | | |
| | Area Weightage @ 8% | 91.20 | | | |
| | Total | 1231.20 | | | |
| | with 160mm outer dia | m | 90 | **1566.00** | **140940.00** |
| | Basic Rate: | 1450.00 | | | |
| | Area Weightage @ 8% | 116.00 | | | |
| | Total | 1566.00 | | | |
| | | | | | |
| 24 | Providing and fixing **CI Nahani trap** of approved make conforming to ISI specifications and construction of Cistern in M-15 as per directions (Rate is inclusive of cost of materials and fixtures and conveyance of materials to work spot). | | | | |
| | S.R Page No.88 item no 12.113 | | | | |
| | -do- **10cms x 7.5cms** | **Each** | 110 | **270.00** | **29700.00** |
| | Basic Rate: | 250.00 | | | |
| | Area Weightage @ 8% | 20.00 | | | |
| | Total | 270.00 | | | |
| | -do- **12.5cms x 7.5cms** | **Each** | 5 | **307.80** | **1539.00** |
| | Basic Rate: | 285.00 | | | |
| | Area Weightage @ 8% | 22.80 | | | |
| | Total | 307.80 | | | |
| | | | | | |
| 25 | Providing and fixing **7.5 cms to 15.00 cms dia NP grating 100 mm dia.** | **Each** | 115 | **172.80** | **19872.00** |
| | S.R Page No.88 item no 12.111 | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Basic Rate: | 160.00 | | | |
| | Area Weightage @ 8% | 12.80 | | | |
| | Total | 172.80 | | | |
| | | | | | |
| 26 | Providing stoneware gully trap of approved quality and make fixing in M-15 and plastering with CM 1:3 wherever necessary.( Rate includes cost of all materials, fixtures and lead). | | | | |
| | S.R Page No.88 item no 12.112.1 | | | | |
| | -do- **15cms x 10cms** | **Each** | 5 | **291.60** | **1458.00** |
| | Basic Rate: | 270.00 | | | |
| | Area Weightage @ 8% | 21.60 | | | |
| | Total | 291.60 | | | |
| | | | | | |
| 27 | Constructing brick masonry inspection chamber 455x610mm, and 450mm depth, ( clear inside dimension ) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover withframe (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38 kg ( weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete M 15 with 20mm and downsize granite metal, foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of ement on walls and bed concrete complete as per tandard design including cost of materials, labour charges, curing complete as per specifications.**450x450mm and 450mm depth** (inside dimesion) for single pipeline, using table oulded non-modular bricks of class designation 50m in cement mortar 1:5, C.I. coyer withframe (light duty) 50x450mm. | Nos. | 9 | **5771.52** | **51943.68** |
| | S.R Page No.73 item no 11.50.2 | | | | |
| | Basic Rate: | 5344.00 | | | |
| | Area Weightage @ 8% | 427.52 | | | |
| | Total | 5771.52 | | | |
| | | | | | |
| 28 | Constructing brick masonry inspection chamber 455x610mm, and 450mm depth, ( clear inside dimension ) for single pipeline, using table moulded non-modular bricks of class designation 50 in cement mortar 1:5, C.I cover withframe (light duty) 455x610mm internal dimensions, total weight of cover with frame to be not less than 38 kg ( weight of cover 23kg and weight of frame 15 kg) R.C.C. top slab with cement concrete M 15 with 20mm and downsize granite metal, foundation concrete M 5 with 40mm and downsize granite metal inside plastering 12mm thick with cement mortar 1:3, finish smooth with a floating coat of ement on walls and bed concrete complete as per tandard design including cost of materials, labour charges, curing complete as per specifications **600x600mm and 450mm depth** (clear inside dimesion) for single pipeline, using table moulded non-modular bricks of class designation 50m in cement mortar 1:5, C.I. cover withframe (light duty) 600x600mm. | Nos. | 12 | **9670.32** | **116043.84** |
| | S.R Page No.73 item no 11.50.1 | | | | |
| | Basic Rate: | 8954.00 | | | |
| | Area Weightage @ 8% | 716.32 | | | |
| | Total | 9670.32 | | | |

| | | | | | |
|---|---|---|---|---|---|
| 29 | Constructing **brick masonry circular type manhole 0.91** m internal dia at **bottom 0.91 m** deep and 0.56m dial at top with table moulded non-modular bricks of 50 class designation 50 in cement mortar 1:4, inside cement plastered 12mm thick with cement mortar 1:3, finished with a floating coat of neat cement, foundation concrete M 10 using 40mm and downsize granite metal and making necessary channel in cement concrete M 50 with 20mm and downsize granite metal finished with a floating coat of neat cement, with S.F.R.C. cover and frame (heavy duty, HD-20 grade designation) 560 mm internal diameter confirming IS: 12592, total weight cover and frame to be not less than 182 kg, fixed in cement concrete 1:2:4,20mm and downsize broken granite metal, providing and removing centering, shuttering including cost of materials, labour charges, HOM of machineries complete as per specifications. (Excavation, footrests and 12mm thick cement plaster on the external surface shall be seperately) | Nos. | 6 | **14663.16** | **87978.96** |
| | S.R Page No.71 item no 11.37 | | | | |
| | Basic Rate: | 13577.00 | | | |
| | Area Weightage @ 8% | 1086.16 | | | |
| | Total | 14663.16 | | | |
| | | | | | |
| 30 | Providing 20mm square **M.S. footrest** and fixing in manhole with M 10 cement concrete block of 20x20x1 Ocms, using 20mm and down size metal of size including cost of materials, labour charges, curing complete complete as per specifications. | Nos. | 8 | **265.68** | **2125.44** |
| | S.R Page No.73 item no 11.44 | | | | |
| | Basic Rate: | 246.00 | | | |
| | Area Weightage @ 8% | 19.68 | | | |
| | Total | 265.68 | | | |
| | | | | | |
| 31 | Providng and fixing to wall, ceiling and floor unplasticised PVC pipes 10.00 kg / sq.cm working pressure chemp plast / wavin or eqvivalent make with pipe fittings, wall clips, making good the wall, ceiling and floor, including cost of materials, labour charges, HOM of equipments and testing complete as per speicifications. | | | | |
| | S.R Page No.75 item no 11.56.1 | | | | |
| | | | | | |
| | -do- with 110mm outer dia | m | 450 | **743.04** | **334368.00** |
| | Basic Rate: | 688.00 | | | |
| | Area Weightage @ 8% | 55.04 | | | |
| | Total | 743.04 | | | |
| | | | | | |
| 32 | Drainage Spouts using 100mm class B GI pipe as per drawing and Technical specification including clamps and nuts etc., complete as per specifications | | | | |
| | S.R.page 239 item 32.5 | | | | |
| | | Nos. | 30 | **1776.60** | **53298.00** |
| | | | | | |
| | Basic Rate: | 1645.00 | | | |
| | Area Weightage @ 8% | 131.60 | | | |
| | Total | 1776.60 | | | |
| | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| 33 | Supplying, installing, testing and commissioning of submersible pump. of Atlanta, Suguna, CRI, Kirloskar and other Equivalent Pumps of capacity 5 HP/3.7. KW | Set | 3 | 34287.00 | 102861.00 |
| | S.R.page XXXXI item No.7 | | | | |
| | | | | | 4360195.08 |
| | | | | | |
| 34 | Miscelleneous | | | | 804.92 |
| | | | | | |
| | GRAND TOTAL | | | | 4361000.00 |

(RUPEES FORTY THREE LAKHS SIXTY ONE THOUSAND ONLY)

CERTIFICATES

1) The work spot has been inspected and found to be necessary
2) This estimate is prepared as per KPWD SR. of 2016-2017 & Approved Rates
3) The provisions were made in this estimate are necessary and adequate.
4) This works come under B.B.M.P. limits.
5) The work is not Spilt Up.

Assistant Engineer
Project Sub Division
Yelahanka Zone, BBMP

Asst.Executive Engineer 10/04/17
Project Sub-Division
Yelahanka Zone, BBMP

Executive Engineer 10/4/17
Project Division
Yelahanka Zone, BBMP Bangalore

Executive Engineer
Project Division
Yelahanka Zone
Bangalore

BRUHATH BANGALORE MAHANAGARA PALIKE

CONSTRUCTION OF HOSPITAL BUILDING IN WARD NO.02

ELECTRICAL WORKS

| SL.NO | Page No | Sl no | Description/Specification | unit | Basic Rate | QTY | TOTAL RATE |
|---|---|---|---|---|---|---|---|
| 1 | 2 | 1.1 | Open Conduit System Supplying heavy gauge PVC conduit pipe .....dia .....mm thick confirming to IS 2509 with suitable size bends, junction boxes, adhesive paste etc., and fixing using inverted wood plugs in case of RCC ceiling and RCC wall / stone structure or rawl plugs in case of brick walls and cement plastering the damaged portion using heavy gauge saddles at an interval of 700mm using NF screws. | | | | |
| | 2 | 1.1.1 | 19/20mm dia 2mm thick | Mtr | 54 | 2350 | 126900.00 |
| 1a | 2 | 1.1.2 | 25mm dia 2mm thick(including fire alarm and cctv) | Mtr | 70 | 7750 | 542500.00 |
| 2 | 2 | 1.4 | Supplying and fixing sheet metal box made out of 18 SWG sheet metal with necessary holes for cable/conduit entry as required with one coat of primer of approved make etc. | | | | |
| | 2 | 1.4.1 | 75x75x65mm | Each | 94 | 33 | 3102.00 |
| 2a | 2 | 1.4.2 | 100x75x65mm | Each | 96 | 22 | 2112.00 |
| 2b | 2 | 1.4.3 | 135x75x65mm | Each | 102 | 13 | 1326.00 |
| 2c | 2 | 1.4.4 | 180x90x65mm | Each | 110 | 264 | 29040.00 |
| 2d | 2 | 1.4.5 | 200x90x65mm | Each | 120 | 12 | 1440.00 |
| 2e | 2 | 1.4.6 | 135x160x65mm | Each | 118 | 98 | 11564.00 |
| 3 | 3 | 1.7 | Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete. | | | | |
| | 3 | 1.7.1 | upto 50mm conduit in brick wall | Mtr | 21 | 2500 | 52500.00 |
| 3a | 3 | 1.7.2 | upto 50mm conduit CC floor | Mtr | 38 | 50 | 1900.00 |
| 4 | 3 | 1.8 | Supplying and fixing of PVC casing and capping on the wall or ceiling using necessary materials like bends, screws at an interval of 300mm ..... etc. as required. | | | | |
| | 3 | 1.8.2 | 25mm | Mtr | 26 | 150 | 3900.00 |
| 5 | 3 | 1.9 | Supplying PVC/GI flexible conduit pipe...mm dia fixing on surface over inverted tapered wooden plugs or phill plugs or rawl plugs and clamped using heavy gauge saddles at an interval of 300mm using NF screws and on either end of the pipe terminated completely | | | | |
| | 3 | 1.9.1 | 20mm | Mtr | 23 | 500 | 11500.00 |
| 5a | 3 | 1.12 | Supplying And Fixing Metal Fan Box with Round Hook. | No | 92 | 180 | 16560.00 |
| | | | | | | | |
| | | | **TOTAL AMOUNT** | | | | **804344.00** |
| | | **2.00** | **WIRES & CABLES** | | | | |
| 6 | 5 | 2.1 | Point wiring using Copper wire with switch. Supplying and wiring adopting loop system in existing PVC Conduit / casing capping using 1100V grade, COPPER conductor flexible multistrand ,FRLS PVC insulated, 2 X1.5Sq.mm Cable confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet / gang box, the other end of the wires shall be terminated with sufficient loose length in a wood/PVC round block. complete for each outlet. GROUP A | | | | |
| | 5 | 2.1.1 | Short point upto 3Mtr from tapping point to out let via switch | Point | 174 | 15 | 2610.00 |
| 6a | 5 | 2.1.2 | Medium point above 3Mtr upto 6Mtr from tapping point to out let via switch | Point | 245 | 198 | 48510.00 |
| 6b | 5 | 2.1.3 | Long point above 6Mtr upto 10Mtr from tapping point to out let via switch | Point | 363 | 218 | 79134.00 |
| 6c | 5 | 2.1.4 | Two outlet in a row, above 3Mtr upto 6Mtr from tapping point to out let via switches | Point | 482 | 90 | 43380.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6d | 5 | 2.1.5 | Three outlet in a row, above 6Mts upto 10Mtr from tapping point to out let via switches | Point | 682 | 75 | 51150.00 |
| 7 | 6 | 2.5 | Wiring for lighting/power circuit using one of FRLS PVC insulated 1100V grade, multistrand Copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 & confirming to GTP of GROUP -A. | | | | |
| | 6 | 2.5.2 | 1.5 sqmm | Mtr. | 18.6 | 4500 | 83700.00 |
| 7a | 6 | 2.5.3 | 2.5 sqmm(1500MTRS FOR FIRE ALARM) | Mtr. | 29.2 | 14500 | 423400.00 |
| 7b | 6 | 2.5.4 | 4 sqmm | Mtr. | 42.1 | 7250 | 305225.00 |
| 8 | 8 | 2.8 | Supplying and drawing Flexible Multicore Cable manufactured with electrolytic grade flexible copper with low conductor confirming to table 3 class 5 of IS:8130-1984 and (Virgin) PVC insulation and sheathed suitable for working voltage upto 1100Volts as per IS-694:1990 & confirming to GTP of GROUP-A. | | | | |
| | 8 | 2.8.7 | 2C X 2.5Sq.mm | Mtr. | 59.1 | 100 | 5910.00 |
| 8a | 8 | 2.8.9 | 4C X 2.5Sq.mm | Mtr. | 105.9 | 100 | 10590.00 |
| | | | **TOTAL AMOUNT** | | | | **1053609.00** |
| | | **3.00** | **SWITCHES SOCKETS & ACCESSORIES** | | | | |
| 9 | 16 | 3.6 | Supplying and fixing superior quality modular switch mounting polycarbonate plate with necessary supporting back plate with required nos. of machine screws, bolts nuts etc., complete on the existing metal/PVC box. | | | | |
| | 16 | 3.6.1 | 1 to 3 Module | Each | 109 | 33 | 3597.00 |
| 9a | 16 | .6.2 | 4 Module | Each | 122 | 22 | 2684.00 |
| 9b | 16 | 3.6.3 | 6 Module | Each | 173 | 13 | 2249.00 |
| 9c | 16 | 3.6.4 | 8 Module | Each | 200 | 264 | 52800.00 |
| 9d | 16 | 3.6.5 | 10 Module | Each | 227 | 12 | 2724.00 |
| 9e | 16 | 3.6.6 | 12 Module | Each | 267 | 98 | 26166.00 |
| 10 | 16 | 3.7.A | Supplying and fixing of modular switch/ Socket/stepped electronic fan regulator/ dimmer/telephone socket etc on existing modular switch plate as per IS 3854 and IS 1293 GROUP A | | | | 0.00 |
| | 16 | 3.7.A.1 | 6Amps one way. | Each | 63 | 976 | 61488.00 |
| 10a | 16 | 3.7.A.2 | 6Amps Two way. | Each | 87 | 6 | 522.00 |
| 10b | 16 | 3.7.A.3 | 6Amps 3way socket. | Each | 95 | 396 | 37620.00 |
| 10c | 16 | 3.7.A.4 | Stepped Fan Regulator. | Each | 286 | 28 | 8008.00 |
| 10d | 16 | 3.7.A.8 | 6Amps Bell push | Each | 87 | 25 | 2175.00 |
| 10e | 16 | 3.7.A.10 | 6/16Amps universal socket | Each | 147 | 214 | 31458.00 |
| 10f | 16 | 3.7.A.11 | TV/Telephone socket | Each | 82 | 110 | 9020.00 |
| 11 | 17 | 3.9 | Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws. | Sq CM | 0.25 | 200 | 50.00 |
| 12 | 17 | 3.12 | Supplying 50mm wooden plug, tapered from 50x50mm to 25x25mm and fixing by using binding wire before concreting a roof slab. | No | 6.8 | 4000 | 27200.00 |
| 13 | 17 | 3.14.A | Supplying and fixing of metal clad industrial plugs and sockets. PLUG 2pole+earth 250V | | | | |
| | 17 | 3.14.A.1 | 10 Amps | Each | 205 | 10 | 2050.00 |
| 13a | 17 | 3.14.A.2 | 20 Amps | Each | 223 | 10 | 2230.00 |
| 14 | 17 | 3.14.B | Supplying and fixing of metal clad industrial plugs and sockets. PLUG 3pole+earth 440V | | | | |
| | 17 | 3.14.B.3 | 20 Amps | Each | 281 | 10 | 2810.00 |
| 14a | 17 | 3.14.B.4 | 30 Amps | Each | 307 | 10 | 3070.00 |
| | | | TOTAL AMOUNT | | | | **277921.00** |
| | | 4.00 | LUMINAIRS/LIGHTS FIXTURES & ACCESSORIES | | | | |
| 15 | 20 | 4.4 | Supplying and fixing cast Aluminum round or oblong type bulk head fitting with GI wire guard, glass cover with 15Watts 230V CFL lamp. | Each | 952 | 10 | 9520.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 15a | 20 | 4.9 | Supplying surface mounted type mirror optic luminaries for single/Twin 28watts fluorescent lamps cross rising of stove enameled deep coloured M.S.low profile housing complete with all accessories and high purity anodized aluminum reflector assembling along with cross louvers including necessary fluorescent tubes with Energy Saving Electronic Ballast. | | | | 0.00 |
| | 21 | 4.9.1 | 1x4'-28Watts | Each | 2743 | 50 | 137150.00 |
| 16 | 24 | 4.23 | Supplying CFL mirror light fitting with 1x11W CFL lamp, choke, Perspex cover and completely wired for use on 230V 50Hz AC supply. | Each | 648 | 20 | 12960.00 |
| 17 | 25 | 4.31 | Supply of recess mounted rolling type LED square or round Down light 12 watts with 4/6W GU 10 LED Lamp Rib Fabricated from Die cast aluminum with white powder coated prewired to mains connector with suitable driver & having swiveling unit of aluminum die cast eye ball & LED Lamp position retained by circular wire spring. 5 years Warranty against any manufacturing defect working under standard electrical condition. | No | 1868 | 375 | 700500.00 |
| 18 | 25 | 4.32 | Supply of LED Square Recessed Down lighter with 18W System Wattage. Housing shall be with powder coated pressure die cast aluminum alloy with corrosion resistant polyester powder coat & with extended heat sink. Diffuser/cover made of Lexan plastic material. Rated life shall be L70 @ 50000 Hrs. which shall has inbuilt electrical protection like over/under voltage, short circuit, overload, open circuit & miswiring. Driver is on constant current driver output driver @ 0.06A with PF > 0.9 with line voltage @ 220-240V @ 50/60Hz, driver efficiency > 85% & THD<15%. LED Efficiency > 130 lm/W at 1W & Fixture Efficiency >75lm/w with CRI > 75 with injection moulded Polycarbonate lens. 5 years Warranty against any manufacturing defect working under standard electrical condition. | No | 4945 | 200 | 989000.00 |
| | 28 | 4.38 | Accessories | | | | 0.00 |
| 19 | 28 | 4.38.4 | Supplying and fixing of round or oblong type bulk head fitting glass cover. | No | 55 | 10 | 550.00 |
| | | | **TOTAL AMOUNT** | | | | **1849680.00** |
| | | **6.00** | **CONTROL SWITCH GEARS & ACCESSORIES** | | | | |
| 20 | 47 | 6.16 | Supplying and fixing miniature circuit breakers on existing MCB distribution boards using necessary fixing materials and 'C' Type curve, indicator ON/OFF, energy cross-3 with Short circuit breaking capacity of 10K and complete wiring as required confirming to IEC 60898. | | | | |
| | 47 | 6.16.1 | 5-32Amps SP | Each | 418 | 140 | 58520.00 |
| 20a | 47 | 6.16.3 | 5-32 Amps DP | Each | 849 | 10 | 8490.00 |
| 20b | 47 | 6.16.6 | 40-63Amps TPN | Each | 1936 | 10 | 19360.00 |
| 21 | 47 | 6.17.II | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.II - Double Door | | | | |
| | 47 | 6.17.II.5 | 8Way SP &N | Each | 1299 | 9 | 11691.00 |
| 21a | 47 | 6.17.II.6 | 12Way SP &N | Each | 1622 | 3 | 4866.00 |
| 22 | 47 | 6.17.III | Supplying and fixing regular MCB distribution boards on wall / wood board / flush mounting using required clamps, bolts, nuts etc., with provision for fixing suitable type capacity MCB's single phase / 3 phase / single door with powder coated painting. Made out of 14 SWG MS enclosure.III - Double Door | | | | |
| | 47 | 6.17.III.7 | 4Way TP &N | Each | 2399 | 14 | 33586.00 |
| 22a | 47 | 6.17.III.9 | 8Way TP &N | Each | 3585 | 4 | 14340.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 23 | 47 | 6.18 | Supplying, fixing and wiring Earth Leakage Miniature Circuit Breaker [ELMCB] 240/450V up to 300mA sensitivity on existing wood/panel board | | | | |
| | 47 | 6.18.2 | 32-40 Amps 2 pole | Each | 2623 | 11 | 28853.00 |
| 23a | 47 | 6.18.3 | 32-40 Amps 4 pole | Each | 2936 | 6 | 17616.00 |
| 23b | 47 | 6.18.4 | 63 Amps 4 pole | Each | 3350 | 12 | 40200.00 |
| 24 | 50 | 6.43.B | Supplying and fixing of Metal Socket set of 2pole and earth plugs and socket for incorporating SP and TP MCB (Without MCB ). The entire plug and socket shall be mounted in a thermoplastic / powder coated metal box & wired Completely. TP & N | | | | |
| | 50 | 6.43.B.3 | 20Amps | Each | 1170 | 10 | 11700.00 |
| 24a | 50 | 6.43.B.4 | 30Amps | Each | 1614 | 10 | 16140.00 |
| | | | | | | | |
| | | | **ELECTRICAL PANELS AS PER MARKET RATES** | | | | |
| | | | **Supply and Installation of LT KIOSK** | | | | |
| 25 | | 1 | **LT KIOSK** | Sets. | 220000 | 1 | 220000.00 |
| | | | **INCOMER :** | | | | |
| | | | 800A TPN MDO ACB WITH ACCESSORIES | Nos. | | 1 | |
| | | | RYB LED INDICATING LAMPS WITH MCB | Sets. | | 1 | |
| | | | VOLTMETER WITH VSS | Sets. | | 1 | |
| | | | AMMETER WITH ASS | Sets. | | 1 | |
| | | | 800/5A CL-1 10VA CT'S | Sets. | | 1 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 800A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| | | | | | | | |
| 26 | | 2 | **MAIN PANEL** | Sets. | 622000 | 1 | 622000.00 |
| | | | **EB INCOMER :** | | | | |
| | | | 630A 4P EDO ACB WITH ACCESSORIES | Nos. | | 1 | |
| | | | RYB LED INDICATING LAMPS WITH MCB | Sets. | | 1 | |
| | | | ON OFF TRIP LED INDICATING LAMPS | Sets. | | 1 | |
| | | | MDM METER | Nos. | | 1 | |
| | | | 800/5A CL-1 10VA CT'S | Sets. | | 1 | |
| | | | **DG INCOMER :** | | | | |
| | | | 250A 4P MOT. MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | RYB LED INDICATING LAMPS WITH MCB | Sets. | | 1 | |
| | | | ON OFF TRIP LED INDICATING LAMPS | Sets. | | 1 | |
| | | | MDM METER | Nos. | | 1 | |
| | | | 250/5A CL-1 10VA CT'S | Sets. | | 1 | |
| | | | **INTERLOCKING :** | | | | |
| | | | ELECTRICAL INTERLOCKING BETWEEN INCOMERS USING CONTACTORS | | | | |
| | | | **OUTGOINGS :** | | | | |
| | | | ON OFF TRIP LED INDICATING LAMPS | Nos. | | 9 | |
| | | | 200A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | 125A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | 100A 4P MCCB WITH ACCESSORIES | Nos. | | 7 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 630A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| 27 | | 3 | **GROUND FLOOR PANEL** | Sets. | 89000 | 1 | 89000.00 |
| | | | **INCOMER :** | | | | |
| | | | 200A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | **OUTGOINGS :** | | | | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | 63A TPN MCB | Nos. | | 8 | |
| | | | 40A TPN MCB | Nos. | | 3 | |
| | | | 40A DP MCB | Nos. | | 2 | |
| | | | 80A TPN MCB | Nos. | | 2 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 200A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| | | | | | | | |
| 28 | | 4 | **FIRST FLOOR PANEL** | Sets. | 56000 | 1 | 56000.00 |
| | | | **INCOMER :** | | | | |
| | | | 100A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | **OUTGOINGS :** | | | | |
| | | | 63A TPN MCB | Nos. | | 8 | |
| | | | 40A TPN MCB | Nos. | | 3 | |
| | | | 40A DP MCB | Nos. | | 2 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 100A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| 29 | | 5 | **SECOND FLOOR PANEL** | Sets. | 56000 | 1 | 56000.00 |
| | | | **INCOMER :** | | | | |
| | | | 100A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | **OUTGOINGS :** | | | | |
| | | | 63A TPN MCB | Nos. | | 8 | |
| | | | 40A TPN MCB | Nos. | | 3 | |
| | | | 40A DP MCB | Nos. | | 2 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 100A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| | | | | | | | |
| 30 | | 6 | **COMMON SERVICE PANEL** | Sets. | 64000 | 1 | 64000.00 |
| | | | **INCOMER :** | | | | |
| | | | 125A 4P MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | **OUTGOINGS :** | | | | |
| | | | 63A TPN MCB | Nos. | | 11 | |
| | | | 40A DP MCB | Nos. | | 1 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 125A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY PQWDER COATED PANEL | | | | |
| 31 | | 7 | **APFC PANEL ( 60kVAR )** | Sets. | 95000 | 1 | 95000.00 |
| | | | **INCOMER :** | | | | |
| | | | 200A TPN MCCB WITH ACCESSORIES | Nos. | | 1 | |
| | | | APFC RELAY ( 6 STAGE ) | Nos. | | 1 | |
| | | | AUTO MANUAL SEL. SWITCH | Nos. | | 1 | |
| | | | RYB LED INDICATING LAMPS WITH MCB | Sets. | | 1 | |
| | | | **OUTGOINGS :** | | | | |
| | | | 63A TP MCB | Nos. | | 3 | |
| | | | 32A TP MCB | Nos. | | 2 | |
| | | | 16A TP MCB | Nos. | | 1 | |
| | | | 25kVAR CAP. DUTY CONT | Nos. | | 3 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| | | | 10kVAR CAP. DUTY CONT | Nos. | | 2 | |
| | | | 5kVAR CAP. DUTY CONT | Nos. | | 1 | |
| | | | 25kVAR CAPACITOR | Nos. | | 3 | |
| | | | 10kVAR CAPACITOR | Nos. | | 2 | |
| | | | 5kVAR CAPACITOR | Nos. | | 1 | |
| | | | ON OFF ILPB | Sets. | | 6 | |
| | | | **BUSBAR & FABRICATION :** | | | | |
| | | | 200A CAPACITY AL. BUSBAR WITH HEAT SHRINKABLE SLEEVES | | | | |
| | | | PANEL FABRICATION WITH 14/16 SWG CRCA SHEET | | | | |
| | | | SIEMENS GREY POWDER COATED PANEL | | | | |
| | | | **TOTAL AMOUNT** | | | | **1467362.00** |
| | | | | | | | |
| | | **7.00** | **L.T.U.G CABLE** | | | | 0.00 |
| **32** | 55 | 7.1 | Supplying, fixing, wiring, earth electrode for grounding conduits, I.C. cutouts and other equipment's on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried in a pit ... The pit should be filled with equal proportion of salt and charcoal 150mm all-round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3. of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia | No | 2727 | 10 | 27270.00 |
| **33** | 55 | 7.2 | Supplying fixing and wiring earth electrode for grounding of lifts, transformers, DG sets etc. using 40mm dia 2.9mm thick 2.5 mtr long GI pipe with GI funnel with mesh and suitable size reducer fixed on the top of the earth electrode. The funnel should be enclosed in a CC chamber of 400x400x400mm with a cast iron cover. The earth electrode shall have staggered holes of 12mm dia and the electrode should be covered 150mm all-round with alternate layers of salt and charcoal from the bottom of the CC chamber. The connection from the electrode is to be established through GI strip using GI bolts and nuts. | No | 4317 | 8 | 34536.00 |
| **34** | 55 | 7.3.A | Supplying and running of GI/Copper strips for grounding | | | | 0.00 |
| | 55 | 7.3.A.2 | 25x6mm | Mtr | 118 | 500 | 59000.00 |
| **34a** | 55 | 7.3.A.3 | 40x6mm | Mtr | 166 | 75 | 12450.00 |
| **34b** | 55 | 7.3.A.5 | 600x600x3mm GI Plate | Each | 784 | 8 | 6272.00 |
| **34c** | 55 | 7.3.B | Supplying and running of GI/Copper strips for grounding connections, using necessary fixing materials as required. 25x3mm Copper strip | | | | 0.00 |
| **34d** | 55 | 7.3.B.6 | 25x3mm | Mtr | 523 | 75 | 39225.00 |
| **34e** | 55 | 7.3.B.10 | 600x600x3mm plate | Each | 7148 | 6 | 42888.00 |
| **35** | 55 | 7.4 | Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruded inner sheathed, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No. of Strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 & confirming to GTP of GROUP-A. | | | | 0.00 |
| | 55 | 7.4.1 | 2 core 10 sqmm | Mtr | 87.6 | 650 | 56940.00 |
| **35a** | 55 | 7.4.2 | 4 core 10 sqmm | Mtr | 118.8 | 650 | 77220.00 |
| **35b** | 55 | 7.4.4 | 4 core 16 sqmm | Mtr | 140.4 | 950 | 133380.00 |
| **35c** | 55 | 7.4.5 | 3.5 core 25 sqmm | Mtr | 165.6 | 120 | 19872.00 |
| **35d** | 56 | 7.4.7 | 3.5 core 50 sqmm | Mtr | 265 | 280 | 74200.00 |
| **35e** | 56 | 7.4.8 | 3.5 core 70 sqmm | Mtr | 270 | 25 | 6750.00 |
| **35f** | 56 | 7.4.13 | 3.5 core 240 sqmm | Mtr | 1030.8 | 100 | 103080.00 |
| **36** | 61 | 7.8.A | Labour charges for laying of 1.1 KV class UG cable in existing trench GI pipe / stoneware pipe / on wall / on pole as required.In existing trench/duct. | | | | 0.00 |
| | 61 | 7.8.A.1 | 6 sqmm to 16 sqmm | Mtr | 10.8 | 2250 | 24300.00 |
| **36s** | 61 | 7.8.A.2 | 25 sqmm to 75 sqmm | Mtr | 16.2 | 425 | 6885.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 36b | 61 | 7.8.A.3 | 95 sqmm to150Sqmm | Mtr | 21.6 | 100 | 2160.00 |
| 37 | 61 | 7.9 | Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the required ground level and consolidating etc., complete.(As per Civil SR KSRB I-2, P-7) | | | | 0.00 |
| | 62 | 7.9.1 | In soil (ordinary) | Mtr | 78 | 100 | 7800.00 |
| 38 | 62 | 7.14 | Supplying and fixing of heavy duty cable glands suitable for UG cable of 1.1 KV class (metal only) | | | | 0.00 |
| | 62 | 7.14.2 | 25mm dia | Each | 86 | 60 | 5160.00 |
| 38a | 62 | 7.14.3 | 32mm dia | Each | 122 | 8 | 976.00 |
| 38b | 62 | 7.14.4 | 45mm dia | Each | 200 | 2 | 400.00 |
| 38c | 62 | 7.14.6 | 63mm dia | Each | 400 | 14 | 5600.00 |
| 39 | 63 | 7.19 | Supplying and fixing 2mm thick perforated cable tray with powder coated paint on existing MS angle support using necessary GI bolts/nuts and washer or welding as required. | | | | 0.00 |
| | 63 | 7.19.5 | 750x50mm | Mtr | 1145 | 50 | 57250.00 |
| 40 | 64 | 7.21 | Supplying tinned copper lugs and crimping and wiring to terminal point for wire of the following sizes. | | | | 0.00 |
| | 64 | 7.21.5 | 10 sqmm | Each | 7.65 | 36 | 275.40 |
| 40a | 64 | 7.21.6 | 16 sqmm | Each | 11.31 | 24 | 271.44 |
| 40b | 64 | 7.21.7 | 25 sqmm Long Barrel | Each | 20.59 | 2 | 41.18 |
| 40c | 64 | 7.21.9 | 50 sqmm Long Barrel | Each | 62.4 | 6 | 374.40 |
| 40d | 64 | 7.21.10 | 70 sqmm Long Barrel | Each | 98.28 | 2 | 196.56 |
| 40e | 64 | 7.21.13 | 150 sqmm Long Barrel | Each | 241.8 | 2 | 483.60 |
| 40f | 64 | 7.21.15 | 240 sqmm Long Barrel | Each | 478.92 | 14 | 6704.88 |
| 41 | 64 | 7.22.B | Supplying and running GI/Copper conductor for grounding and (along with other wires in conduit system of wiring) using necessary suitable size clamps, nails, guttas/spacers etc. Copper wire. | | | | 0.00 |
| | 64 | 7.22.B.6 | 8 SWG | Mtr | 107.7 | 360 | 38772.00 |
| | | | **TOTAL AMOUNT** | | | | **850733.46** |
| | | **9.00** | **FANS & AIR CONDITIONERS** | | | | |
| 42 | 78 | 9.1 | Supplying exhaust fan of 1440 RPM of 300mm (12") size with bracket blades complete for light duty suitable to operate on 230V 50Hz, AC Supply. | Each | 1700 | 20 | 34000.00 |
| 43 | 78 | 9.3.2 | Supplying capacitor type ceiling fan complete with down rod blades, shackle, canopies etc., for operation on 230 volts, 50 cycles. Single phase AC supply conforming to ISS-374-1979 and with double ball bearing system. 56" Sweep (1400mm) | | | | 0.00 |
| | 78 | 9.3.2.2 | Economy model | Each | 1935 | 165 | 319275.00 |
| 44 | 78 | 9.4 | Supplying wall mounting fan suitable to operate at single-phase 230v A.C. supply. | | | | 0.00 |
| | 78 | 9.4.2 | 400mm Sweep | Each | 2534 | 25 | 63350.00 |
| | | | **TOTAL AMOUNT** | | | | **416625.00** |
| | | **11.00** | **NETWORKING & TELECOMMUNICATION** | | | | |
| 45 | 85 | 11.1 | Supplying and drawing UTP-CAT 6E LAN cable. | MT. | 23 | 600 | 13800.00 |
| 46 | 85 | 11.2 | Supplying and drawing PVC flexible one pair telephone unarmoured tinned copper cable. | | | | 0.00 |
| | 85 | 11.2.2 | 2Pair | Rmt. | 13 | 2300 | 29900.00 |
| 47 | 85 | 11.3 | Supplying and drawing PVC insulated gas injected physical foam jelly flooded co-axial TV cable.RG-6. | Rmt. | 35 | 500 | 17500.00 |
| | | | **TOTAL AMOUNT** | | | | **61200.00** |
| | | **12.00** | **UPS, VOLTAGE STABILIZERS, BATTERIES & ACCESSORIES** | | | | |
| 48 | 88 | 12.2 | Supplying, erecting, testing & commissioning of OFF-LINE UPS system suitable for operation on 230V, 50Hz, A/C supply, with all accessories complete and Excluding batteries and wiring complete. | | | | |
| | 88 | 12.2.6 | 5 KVA OFF LINE UPS Two Hour back up Excluding 6x 120Ah batteries | Each | 50293 | 6 | 301758.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 49 | 88 | 12.3 | Supplying, installation, testing & commissioning of 12Volts ..AH batteries in poly propylene container for D.G. sets. Low maintenance batteries, plate type. | | | | |
| | 88 | 12.3.2 | 120 AH capacity. Acid batteries. | Each | 18700 | 30 | 561000.00 |
| | | | **TOTAL AMOUNT** | | | | **862758.00** |
| | | **13.00** | **DIESEL GENERATOR SET** | | | | |
| 50 | 91 | 13.1 | Supplying, erection, testing and commissioning of .....KVA Diesel Generating Set on existing CC platform Comprising of Diesel Engine Developing ..... BHP @ 1500 RPM confirming to BS 5514.The engine should be turbocharged, Air/water cooled with 10 % over load for 1hour in every 12 hours of operation coupled to suitable capacity alternator rated at 415V, 0.8 PF(lag) 50 Hz, 3 phase, 4 wire system, confirming to BS 5000/IS 4722. The alternator shall be of brushless type ,Screen protected, revolving field, Mounted on suitable Channel Iron Base Frame, Complete with suitable capacity Fuel Tank, required nos. of Batteries of 12/24V as per requirement, Acoustic enclosure as per CPCB Approved Norms. | | | | |
| | 91 | 13.1.2 | 125kva/100kw | Each | 864000 | 1 | 864000.00 |
| 51 | 91 | 13.2 | Supply, Erection, testing and commissioning of AMF panel suitable for .....KVA DG set. The panel is of cubical type base/floor mounting control panel with hinged doors, undrilled bottom gland plate, aluminum Bus Bar with the accommodation for .....amps 4 pole contactor for alternator with thermal O/L relay,..... Amps 4 pole contactor for mains, HRC fuse for short circuit protection, Microprocessor based AMF module with supply failure timer, Restoration timer, 3 impulse automatic engine start/stop logic, Mains/generator voltage, ....capacity bypass switch and frequency sensing, PCC 1301 controller with water temperature/Lube oil pressure/ engine speed,(ob Voltage/ampere/Frequency/ KVA, Running-hour count, No of starts, Fault indication, over /under speed, Fails to start, Low oil pleasure, High engine temperature, Under/over voltage, over current, Earth fault relay, with indications for Mains on, Load on Mains, Battery charger on Push buttons AMf module by pass Mode, Battery charger unit with inbuilt Auto/Manual and Flat/Boost facility.(ats switch instead off contractor) | | | | |
| | 91 | 13.2.2 | 62.5 KVA-125kva | Each | 136557 | 1 | 136557.00 |
| | | | **TOTAL AMOUNT** | | | | **1000557.00** |
| | | **16** | **transformer services** | | | | - |
| 52 | 106 | 16.3 | Filtering of oil in the transformer at the transformer center by hot process using "Stream line filter" such time the dielectric strength of the oil in the transformer conforms to ISI specification [Test certificate to be produced] | Litre | 20 | 200 | 4000.00 |
| 53 | 106 | 16.34 | Supplying and Topping -up of new Transil OIL | Per Litre | 170 | 100 | 17000.00 |
| 54 | 106 | 16.32 | Supplying and filling fresh silica gel to the breather of transformers. | Per breather | 140 | 1 | 140.00 |
| 55 | 106 | 16.33 | Supplying and Testing of OIL for Di-Electric strength (BDV) / Acidity | Per Sample | 197 | 1 | 197.00 |
| | | | **TOTAL AMOUNT** | | | | **21337.00** |
| | | **17.00** | **FIXING CHARGES** | | | | |
| 56 | 108 | 17.7 | Fixing all types and all capacities of fluorescent / false ceiling / spot light / CFL / LED fittings indoor on the wall / ceiling / rafters / girders using 23/0.0076" twin twisted PVC insulated wires, required Nos of round blocks and clamps. | | | | |
| | 108 | 17.7.1 | On wall / ceiling / Rafter / Girders | Each | 98 | 685 | 67130.00 |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 57 | 109 | 17.8 | Fixing a ceiling / Wall mounting fan of all capacities and all types to the existing 'S' hook with fan regulator to the existing board together with supplying and fixing 5 amps. ceiling rose, necessary length of 23 / 0.0076 inch PVC insulated twin twisted copper wire and wiring. | Each | 139 | 180 | 25020.00 |
| 58 | 109 | 17.12 | Fixing one exhaust fan in the nitch already left in the wall with bolts and nuts and 5 amps. ceiling rose with sufficient length of 23 / 0.0076 inch PVC insulated twin core wire. | Each | 412 | 20 | 8240.00 |
| | | | **TOTAL AMOUNT** | | | | **100390.00** |
| | | | | | | | |
| | | | **Miscelleneous** | | | | **483.54** |
| | | | | | | | |
| | | | **GRAND TOTAL** | | | | **8767000.00** |

**(RUPEES EIGHTY SEVEN LAKHS SIXTY SEVEN THOUSAND ONLY)**

CERTIFICATES

1) The work spot has been inspected and found to be necessary
2) This estimate is prepared as per KPWD SR. of 2014-2015 & Approved Rates
3) The provisions were made in this estimate are necessary and adequate.
4) This works come under B.B.M.P. limits.
5) The work is not Spilt Up.

Assistant Engineer
Project Sub Division
Yelahanka Zone, BBMP

Assistant Executive Engineer
Project Sub Division
Yelahanka Zone, BBMP

Executive Engineer
Project division
Yelahanka Zone, BBMP Bangalore